

USAWC STRATEGY RESEARCH PROJECT

Transforming the Institutional Army: Changing the Engine of Change

by

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ABSTRACT

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Transformation's irreversible momentum is impeded by workarounds to processes we know do not work. These workarounds only provide temporary partial solutions--often with costly second and third order effects. Therefore, Army Transformation must consider the review and requisite changes required of our basic Institutional processes; in effect, a thorough cross-functional examination of "How the Army is Running." If we are to institutionalize transformation, force management, force development, and force integration must be reviewed for process efficiency, integration and ability to synchronize those actions which result in mission-ready organizations. This paper will focus on components of one process, that of structuring organizations of the Army and perhaps suggest some approaches for process improvement. The structuring function will be reviewed within an analytical framework: the process, the organization, and the technical requirements to streamline the process, and in context, recommend consideration of alternatives for structuring the force.

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ACKNOWLEDGEMENTS

General Maxwell Taylor, in an address given before the U.S. Army War College in February 1960, proposed the following in response to the difficulties we would encounter in a strategic reappraisal of our national security strategy: "I don't say that we should stop everything, tear the Pentagon apart and put it together again before we face up to some of these urgent problems. I consider the situation far too serious to wait upon reorganization. I think we can and should proceed with what we have while we reexamine the machinery at our leisure to see if we can't make it easier for good men to do a better job." Our own strategic reappraisal has generated a necessity to transform the army in order to remain relevant – the pervasive challenge remains "the need to build this future force while fighting a present war. It's like overhauling an engine while you're going at 80 miles an hour ." In my brief respite, my "leisure time" while a student at the Army War College, I wrote this paper to try and find a way for "Good men to do a better job." This paper is dedicated to those good men in Headquarters, Department of the Army, DAMO-FM, who in the context of the Army vision, work countless hours every day to structure, integrate, and synchronize the force. Specifically I wish to thank Dan Egbert, John Runkle, Jim Lucas, and Joe Urbaniak for their editorial guidance and process expertise. I owe many thanks to my Transformation Elective instructor and project advisor, Dr. Doug Johnson, for his wisdom and patience. Most importantly, thanks to my husband, Jerry, for his love and support.

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TRANSFORMING THE INSTITUTIONAL ARMY: CHANGING THE ENGINE OF CHANGE

Insanity: doing the same thing over and over again and expecting different results.

- Albert Einstein

On 11 December 2001, President George Bush delivered a speech at the Citadel about the future security of our nation. In that speech he referenced his September 1999 Citadel remarks when as a candidate for President he had stated that "...America was entering a period of consequences that would be defined by the threat of terror, and that we faced a challenge of military transformation." His December speech indicated that the threat was now revealed and that transformation was now the "military and moral necessity of our time." What had changed from 1999 to 2001 was the sense of urgency to accomplish transformation – "the need to build this future force while fighting a present war. It's like overhauling an engine while you're going at 80 miles an hour." ¹

Much has been written regarding transformation of the military. One source, the 2001 Quadrennial Defense Review (QDR) states that in order to create the United States military of the twenty-first century, capable of achieving the objectives of the defense strategy designed for countering threats of the new world order, requires exploitation of new approaches to operational concepts, use of old and new technologies, and use of new forms of organization. It proposes transformation as a process to continuously improve the preeminence of the United States military in the context of disproportionate and discontinuous changes in the strategic environment. Hence, transformation is not an end state, rather an on-going evolutionary process. Furthermore, in early stages of the process, only small portions of the force may undergo transformation, while the remainder of the force remains prepared to deal with extant threats. ²

The thesis of the QDR has merit. It is without question that "small transformed forces with a critical mass of spearhead capabilities can produce disproportionate strategic effects." ³ Operation Enduring Freedom and the on-going War on Terrorism are clear evidence of this occurrence. There is also current evidence to support QDR's proposal that successful transformation goes beyond merely changing the organization or leveraging technology. For example, the battle plan of the current Operation Iraqi Freedom is based on a transformational concept developed at the National Defense University called "Shock and Awe." While too early to predict the Operation's outcome, the revolutionary concept achieves rapid dominance

through focusing on the psychological destruction of the enemy's will to fight rather than on the physical destruction of his military forces,⁴ and appears to date to be producing “disproportionate strategic effects.”⁵

And so in the context of a new strategic environment, in order to remain relevant, it follows that a valid requirement exists to transform the military. Consequently, even before the completion of the QDR, the Army had begun its evolutionary process. On 12 October 1999, the Secretary of the Army and the Chief of Staff of the Army articulated a vision designed to transform the Army to meet the emerging threats of the 21st century.⁶ The vision for the Army does not propose to transform merely a single brigade at Ft. Lewis or advocate a new warfighting concept, but rather totally “transform landpower to enable a joint force strategically responsive across the full spectrum of operations.”⁷ In order to accomplish this formidable task, the Army seeks to transform all aspects of doctrine, organization, training, materiel, leader development, personnel, and facilities (DOTMLPF) in order to leverage emerging technologies while maintaining warfighting superiority.⁸

Army transformation will be an on-going evolutionary process. The process is outlined in the “Transformation Campaign Plan (TCP),” and is organized along thirteen lines of operation.⁹ It follows an objective-oriented, conditions-based strategy and proceeds through the integration and synchronization of the lines of operation in accordance with series of decisions. The major objectives of the plan are oriented toward the Operational Army (in line with DOTMLPF), are all-encompassing, and include transforming the Institutional Army as well—those schools, services, facilities, installations and associated processes that contribute directly to the ability of the force to complete its mission.¹⁰

The TCP lists three major objectives: the Initial Force, the Interim Force, and the Objective Force. Although the transformation process is continuous and without an end state, the TCP does profess that the end state of the campaign will be the Army’s realization of Objective Force characteristics. These characteristics, which will enable the Objective Force to dominate across the full spectrum of operations, are indicative of an organization that is more responsive, deployable, agile, versatile, lethal, survivable, and sustainable.¹¹

Over the last four years, the Army has focused its collective efforts to move toward achieving the enabling characteristics of the Objective Force. There has been a Herculean attempt to synchronize and integrate the elements of the Army vision, and set the conditions to achieve objectives outlined in the TCP. It is without question that innovations have developed in the design of brigade combat teams and designs are emerging for the Unit of Action, the first organization with Objective Force capabilities. Change has occurred in the Institutional Army as

well—Army Materiel Command and the Army Staff as a function of Headquarters, Department of the Army Redesign. However the associated force management processes of the Institutional Army that are being used to effect transformation have not changed significantly. One could argue the Army remains wedded to mechanisms and processes that have existed since World War II, and as Einstein so aptly stated, you cannot do the same thing over and over and expect different results.

Perhaps LTG General Riggs, head of the Army's Objective Force Task Force, makes the point more eloquently, in a December 8 cover letter addressed to Army leaders that accompanied the final draft of a white paper called "The Objective Force in 2015."

"If we are to institutionalize transformation, our entire planning, programming, budgeting and execution system, Total Army Analysis and acquisition processes must change. We no longer have the luxury of time or the available resources to rely on workarounds to processes we know do not work....Our philosophy and culture as an Army must also change."¹²

His argument is purported by the QDR which advocates a new capabilities-based force sizing construct, joint experimentation, exploiting research and development for technology insertion, and streamlining financial and business processes in order to effect transformation.¹³ This would include transforming the QDR, the Joint Strategic Planning System (JSPS), the Planning, Programming, and Budgeting System (PPBS), the Joint Warfighting Capabilities Assessment (JWCA), Joint Requirements Oversight Council (JROC) and Joint Experimentation, to name a few.¹⁴ Although these processes are external to the Army, subsequent and simultaneous change of Army processes must occur by necessity as well, in order to remain linked to Joint and Department of Defense (DOD) processes and timelines.

Some of the current Army processes and systems that will be used to effect transformation, and warrant review, include Total Army Analysis (TAA), Force Management Analysis Reviews (FORMAL), Force Design Update (FDU), the Systems Architecture Process, the Command Plan, Structure Manning Decision Review (SMDR), Training Resources Arbitration Panel (TRAP), the Army's Planning, Programming, Budgeting, Execution System (PPBES), Active Component/Reserve Component (AC/RC) Integration, Army Experimentation, and Army Transformation Wargames and Analysis. These processes dictate the functional environment of the TCP.¹⁵

These processes are merely a few examples of how to effect change within the Army and enable mission accomplishment. The Army is not an organizational anomaly. All complex organizations operate with-in a framework of well-defined systems and processes.¹⁶ Process is defined as "a set of logically related tasks performed to achieve a defined outcome." A process

is "a structured, measured set of activities designed to produce a specified output for a particular customer or market. It implies a strong emphasis on how work is done within an organization."¹⁷ The outcome of the transformation will be highly dependent upon the processes which effect it. It seems ludicrous to advocate building an Army for the 21st century without a thorough review of the World War II mechanisms which will bring about change.

Although separate theses could be written on each of the processes mentioned to this point, the remainder of this paper will focus on components of one process, that of structuring organizations of the Army and perhaps suggest some approaches for process improvement. The structuring function will be reviewed within an analytical framework: the process, the organization, and the technical requirements to streamline the process. The first category will focus on the components of the process where tasks and their relationships might benefit from modification. The second category will discuss the people and organizations that complete the process. Finally the last category will look at ways to automate the process. The review is not all inclusive as more work must be done simply because of the interrelationship of this with other Army, Joint and DOD processes; rather it serves as a critical analysis to get us closer to being able to "...overhaul an engine while you're going at 80 miles an hour."

DESIGNING A CORVETTE ENGINE WITH A 1939 CHEVY PROCESS—PROBLEMS WITH THE PROCESS

Military transformation, often technology based, has occurred throughout history. The stirrup in the 8th century allowed for mounted warriors, advanced artillery systems in the 15th century rendered castles vulnerable, and rifling of the 19th century led to defensive trench warfare.¹⁸ General George C. Marshall, Chief of Staff of the U.S. Army in the interwar years, is credited with transforming and preparing the Army for World War II, through systematically resourcing, structuring and integrating new equipment, personnel, and organizations while training. In other words, he established and fielded mission ready organizations through the integration of functional processes—what we refer to today as force development, force management and force integration.¹⁹

While General Marshall's integration of functional processes to transform the Army created an organization which proved successful in World War II, history also provides an example where the similar force development, force management and force integration processes designed to facilitate organizational change actually served to impede it. In 1980, General Edward "Shy" Meyer, the Army's Chief of Staff identified an organizational requirement, with deployability as the impetus, to make a heavy division lighter and more deployable, while inserting technology to enhance its lethality. One source attributes the failure of General

Meyer's High Technology-Light Division (HTLD) to reach full operational capability to the stove-piped parochialism of the force development process.²⁰

The force development process determines Army DOTMLPF requirements and translates them into programs and force structure. Force integration then serves as the synchronized, resource-constrained execution of an approved force development program, enabling force management, the capstone process of establishing and fielding mission-ready Army organizations. While the end state or output of the force management process focuses on horizontally arrayed structures, that is, brigades, divisions, and corps, the input to the process, in the framework of force development, is vertical. The input, developed through translating organizational requirements into organizational models and force structure, is provided by Training and Doctrine Command's (TRADOC) branch proponent schools and flows through the force design update process to a branch-specific organizational integrator (OI) at Headquarters, Department of the Army (HQDA).²¹ While the functional expertise of each branch proponent is paramount in identifying respective contributions to the combined arms team, it is the effective horizontal integration by echelon which achieves the desired output, or mission-ready organizations. Perhaps what is lacking is an appropriate assessment by echelon (desired output) to focus inputs, avoid suboptimization, and provide for integrated resourcing decisions.

The General Accounting Office Report on "Business Process Reengineering" validates this hypothesis, clarification is provided in context as follows:

"Reengineering recognizes that an organization's business processes [force development] are usually fragmented into sub-processes and tasks that are usually carried out by several specialized functional areas [branches] within the organization. Often no one is responsible for the overall performance of the entire process [output--brigade, division, and corps]. Reengineering maintains that optimizing the performance of sub-processes can result in some benefits, but cannot achieve dramatic improvement, if the process [branch] itself is fundamentally inefficient and outmoded. For that reason, reengineering focuses on redesigning the process as a *whole* in order to achieve the greatest possible benefit to the organization and their customers. This drive for realizing dramatic improvements by fundamentally rethinking how the organization's work should be done distinguishes reengineering from process improvement efforts that focus on functional or incremental improvement."²²

Transformation requires an integrated horizontal assessment process to redesign the Army as a whole. Army Regulation (AR) 11-40 outlines a functional area assessment (FAA) process which afforded branch proponents the opportunity to brief the Vice Chief of Staff of the Army on a recurring biennial schedule of the overall health of their branch.²³ In 2000, General John M. Keane, Vice Chief of Staff of the Army (VCSA) suspended the process and directed the G3, Executive Agent of the FAA process, to redesign the assessment by echelon. The resultant

process, the Force Management Analysis (FORMAL) Review, sought to examine by echelon the impact of restructuring the Army through the POM years, through a DOTMLPF lens, with emphasis on readiness, combat power and force modernization. The process goal was to ensure cost effective transition of the force, vice suboptimization, thus enabling the VCSA to make integrated resourcing decisions.²⁴

The process was initiated on 20 March 2001 as an assessment of the corps design. The assessment was to answer whether the corps was currently designed to maintain readiness and meet the warfighting needs of the combatant commander, while postured to transform to the objective force capabilities.²⁵ All Army Corps provided input and Forces Command (FORSCOM) and Training and Doctrine Command attended a series of action officer and Council of Colonel level meetings led by HQDA. Regrettably, TRADOC could not support the assessment process due to other workload requirements. As a result, only FORMALS of functional areas, Space and Weapons of Mass Destruction-Civil Support Teams, have been conducted to date.²⁶

Consequently, if an organization lacks an integrated assessment process to clearly define its end state, or desired output, and in turn direct process inputs it becomes very difficult to focus the internal processes and prioritize the results they are intended to achieve. This precipitates an inability to perform second and third order effects analysis to advise senior leader's decisionmaking and results in workarounds, wasting both time and money. Even with a desired integrated outcome, as in the case of the Stryker Brigade Combat Team (SBCT), and an integrated effort by functional proponents to provide input, stove-piped processes fail simply because they are not synchronized cross-functionally. Perhaps the apparent lack of synchronization rests with a failure to understand the process. It then becomes very difficult to advise the senior leadership of what will occur should the processes become de-linked.

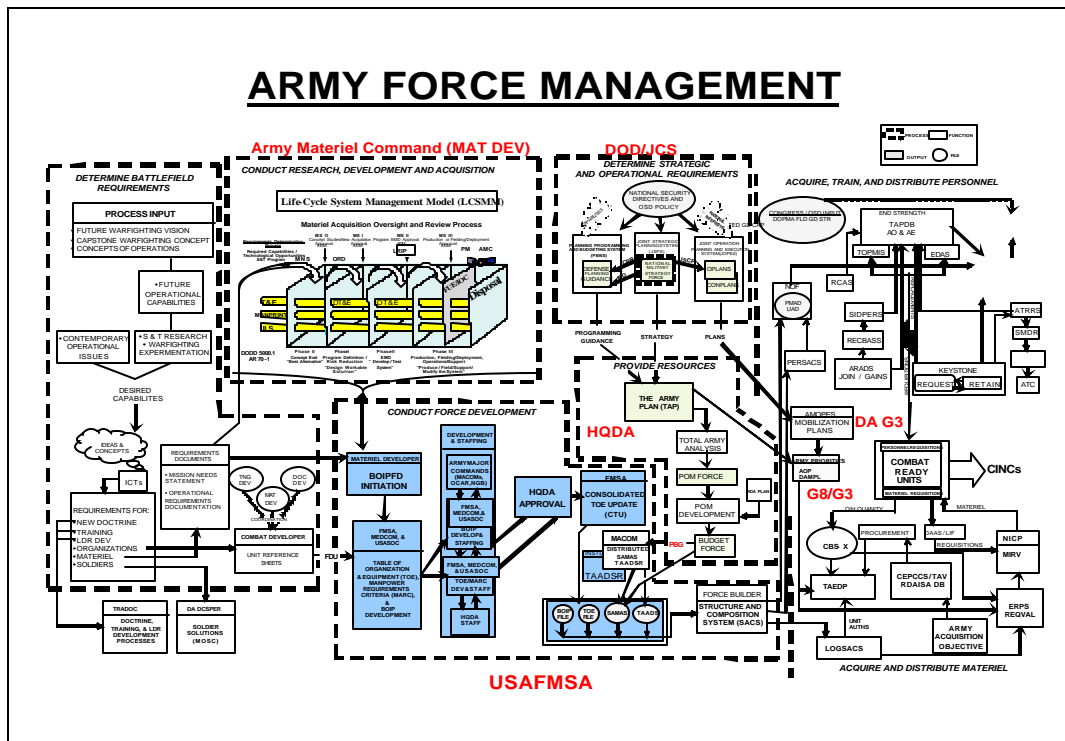


FIGURE 1

The Army as an organization must develop a common understanding of the processes they use to develop organizations before they can attempt to improve them. Force management, as depicted in figure 1,²⁷ is a confusing web of interconnected processes and subprocesses, many of which cut across functional organizations, and are much too time consuming. This does not propose that steps or processes should be deleted, rather it substantiates the argument that leaders and staffs must have a common understanding of how the processes work and how they are interconnected. The following example is provided, and although the results are not disastrous, it merely provides specifics validating the necessity for process redesign in order to ensure synchronization and integration.

The Clinger/Cohen Act of 1996 mandated that the Army's Chief Information Officer (CIO/G6) develop, maintain, and facilitate the implementation of integrated information technology architecture. The Army's integrated information architecture is the Army Enterprise Architecture (AEA), a set of architectures that serve as the blueprint for implementing the Army's Command, Control, Communications, Computers, and Intelligence/Information Technology (C4I/IT) strategy. The AEA is the centerpiece of network-centric warfare (NCW) and is essential to implementing the operational concepts of Joint Vision 2020, the DOD Global

Information Grid (GIG), and subsequently in turn effect Army Transformation and its associated Modernization strategy.²⁸

The Army Enterprise Architecture Development Plan (AEADP) methodology for unit C4ISR architectures is modeled upon the Army's force development documentation process as described in AR 71-32 (Force Development and Documentation-Consolidated Policies). This regulation outlines TOE development responsibilities and policies and provides specific procedural guidelines for properly preparing TOE and modified TOE (MTOE). Such a design facilitates the necessary linkages between the Architecture Development Process and the Army's Force Development (FD) Process.²⁹ The U.S. Army Force Management Support Agency provided the following figure to illustrate the timeline.³⁰

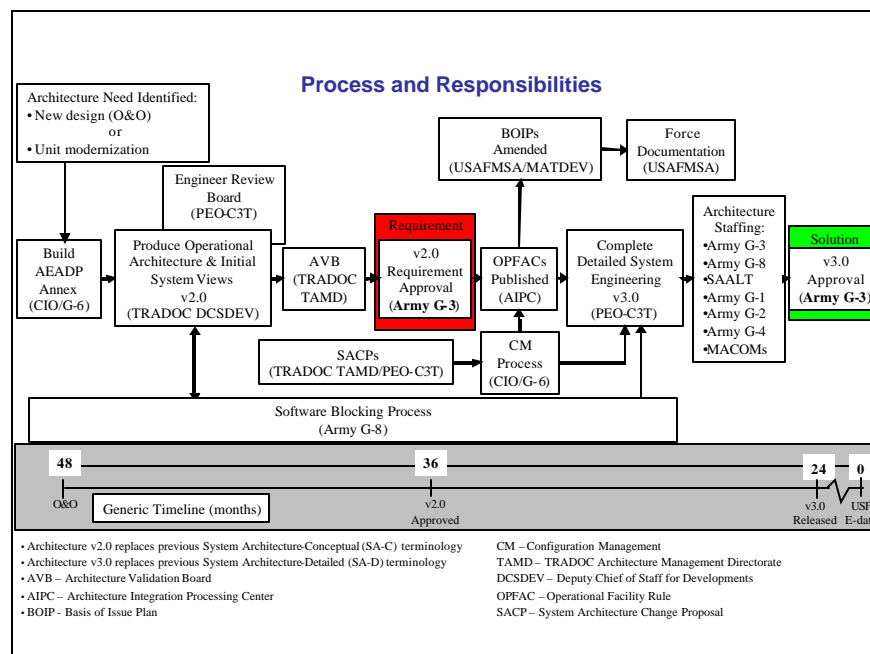


FIGURE 2

The timeline on this figure depicts a major problem with documenting the systems architecture—from Operations and Organizational (O&O) Concept to unit e-date, systems architecture development requires 48 months of lead time.

With respect the SBCT, the de-linkage of the systems architecture and force integration processes are described in the following details. HQDA documented the SBCT in 2001 while

the O&O (the doctrine) was in development. Documenters made the best-guess on power generation requirements. This generated two issues. (1) The O&O drives the Operational Architecture (OA) development which drives the Systems Architecture (SA), i.e. digital and communication systems requirements. In spiral development, what normally requires 36-48 months was being done simultaneously. Hence, the power generation requirements for the SBCT were at a significant shortfall based upon an immature SA. (2) Even with a mature SA, documenters are finding that certain new technologies are transparent in the SA, but yet require power to operate them. Also, as Tactical Operations Centers (TOCS) were not yet identified by a HQDA-approved requirements document (currently in staffing) there appeared to be no integration by multiple Project Managers on resultant aggregate power requirements. Documenters used current or developmental line item numbers (LINs) via a doctrinal template process and fell short on power generation. Adding additional power generation requirements is now necessary to provide 24/7 operations and to solve a newly found issue associated with increased digitization—environmental control units (ECUs) are required to cool the proliferation of digitized systems. These ECUs also generate requirements for power generation units. While Tables of Organization and Equipment (TOEs) are designed to provide mobility for 100% of the organization, current doctrinal templating does not consider the increased or transparent SA requirements or associated support items of equipment and CTA items. Mobility of the organization is probably realistically only at 80%.³¹

As a result, the magnitude of the problem exacerbated by spiral development and insertion of technology without regard to updating doctrinal templates, approving requirements documents or streamlining and linking current Army processes follows. The lighter, more lethal and sustainable SBCT has suddenly grown by 35-15KW generators, one-30 KW generator, nine-60KW power plants and 29 ECUs. This increased power generation requirement increased the number of vehicles to 19-HUMMVs and eight-FMTVs, which generated a requirement for 35 additional drivers and 15 mechanics. It is estimated that the SBCT will now require 31 additional aircraft sorties.³²

This example does not begin to state all the associated second and third order affects caused by the lack of synchronization of force integration processes, i.e., are the correct soldiers available in adequate numbers to maintain the additional equipment, will additional training seats be available to train the correct MOS's in requisite skills and numbers, or will a degradation in readiness of the force be the end result?

There is a quality control measure available to predict desynchronization of force management processes and subsequently prevent degradation of readiness. The Force

Validation Committee (FVC) biennially reviews organizations two years prior to activation (three years for Reserve Components) to ensure that the unit will activate at a C-3 or better readiness level. If a unit will not be able to attain a C-3 rating, corrective actions are identified/implemented, i.e. funding priorities are adjusted, and/or the effective date (EDATE) of the unit is changed until corrective action can be taken.³³ Since 2000, HQDA has conducted only two FVCs, primarily because de-linkage of processes has made it increasingly difficult to provide fidelity of documentation in the data base at the appropriate lead time, and second, staff workload was focused against higher priority requirements.³⁴

Perhaps, the answer to force readiness and transformation of organizations is inherent in the resourcing phase of the Total Army Analysis (TAA) process. The research for this project actually began as an examination of that phase of force development where the organizational requirements compete for resourcing. LTG Riggs alluded to TAA in his Objective Force white paper as one of the processes which must change. Perhaps the TAA workarounds to which LTG Riggs referred would not be required if improvements were made to the aforementioned phases of requirements generation. However, TAA does more than resource new organizational requirements and has its own associated inherent process issues.

The TAA process is a biennial process requiring total Army involvement from all components (Active, Army National Guard, and U.S. Army Reserve), Major Commands (MACOMS), and TRADOC. It examines and resources both the TOE and Tables of Distribution (TDA) Army in all components (COMPOs). It consists of both quantitative and qualitative analysis and culminates in an Army senior leadership decision on Force Structure Authorizations for the next Program Objective Memorandum (POM). This decision on the distribution of Army structure is promulgated to the field in the Army Structure Message or ARSTRUC.³⁵

As a whole, TAA's purpose is to define the required "operating and generating" forces necessary to support and sustain the combatant command forces outlined in the Defense Planning Guidance (DPG). Ultimately, it links the Army's force structure to the National Military Strategy (NMS).

Force guidance consists of the NMS, DPG, Quadrennial Defense Review (QDR) decisions, strategic lift capabilities, combat force weapons performance, consumption factors, threat forces data, Army Support to Other Services (ASOS) requirements, force allocation rules, and other information/data related to computer modeling. Past DPGs dictated specific quantities and types of combat forces (corps, divisions, separate brigades, armored cavalry regiments, ranger battalions, and special forces groups) for employment in DOD-directed

scenarios. Formerly known as Major Theater Wars (MTWs), these scenarios are now called Major Combat Operations (MCOs) and Smaller Scale Contingencies (SSCs). The DPG 04 force-sizing construct (based on threat) has transformed to a capabilities-based force structure arrayed to meet the new “1-4-2-1-1” strategy. This new strategy is defined as Defend the United States, Deter Forward in Four Critical Regions, Swiftly Defeat the Efforts (in two regions simultaneously), and achieve Decisive Victory in at least one. To meet this strategy, Force Structure must also be applied against unit rotational requirements, strategic reserve requirements, and transformation initiatives.³⁶

Based on the Force Guidance data, the Quantitative Analysis (computer modeling) uses the proponent-developed allocation rules to determine the number of each type unit required to support the NMS/DPG requirement. After the Army senior leadership approves the total force requirements, the Resourcing Phase begins with a comparison of data files (MATCH report) between the approved total force requirements and the current force file (MFORCE). The resulting report ultimately provides the delta between the “on-hand” and “required” force structures.³⁷

Qualitative Analysis is then accomplished to develop the initial POM force within end strength guidance. Based on resource constraints (personnel, equipment and dollars), unified command/MACOM day-to-day requirements, operational tempo (OPTEMPO), and an acceptable level of risk, the Qualitative Analysis develops the recommended MTOE resourcing across all components, Active Component (COMPO 1) by MACOM, Army National Guard (COMPO 2), U.S. Army Reserve (COMPO 3), and the Pre-positioned Equipment Sets (COMPO 6). Force structure risk is identified in the Requirements Not Resourced (COMPO 4). Additionally, direct and indirect Host Nation Support (HNS) offsets (COMPOs 7 & 8), and Logistics Civil Augmentation Program (LOGCAP) offsets (COMPO 9) are identified.³⁸

The resourcing conference conducted near the end of this phase is an emotional event. It focuses on COMPO-related issues and involves claimant versus billpayer resourcing discussions with consideration of priorities versus risks. The Combatant Commander representatives (Army Component Commanders) want to ensure their theater specific requirements are met. However, within given resource constraints, it is obvious there will always be some inherent risk.

There is also risk in determining whether the outcome is affordable and supportable. Based upon the recommended force, the ARSTAF conducts a force feasibility review (FFR). The final recommendations are then submitted to the Army leadership (VCSA, CSA, SecArmy)

for decision and then published in the ARSTRUC. This approved force file becomes the MTOE submission for the next Program Objective Memorandum (POM).³⁹

Implementation (programming) of the TAA force is accomplished in three-steps: publication of the ARSTRUC message, execution of the Command Plan process, and adjustments to the SAMAS M-force. A discussion of these processes follows:

The ARSTRUC message is the justification for entering changes (e.g., activations, conversions, inactivations, ALO changes), with a tentative effective date (EDATE), into the HQDA Structure and Manpower Authorization System (SAMAS) database. Unless special guidance/directive is provided, the EDATE is within the POM years covered by the current TAA process. For example, TAA 09 affected the FY 04-09 force file. As TAA process timelines progress, changes with a TAA 09 EDATE during FY 04-09 may be overridden by changes that result from the TAA 11 process (impacts FY 06-11).⁴⁰

The Command Plan (CPLAN) process provides detailed integration and documentation. The Army uses this period to update and create MTOE and TDA documents. These documents officially record decisions on missions, organizational structure, and requirements and authorizations for personnel and equipment.

The process will affect the FY three years out from when preparation begins (e.g., CPLAN for FY 05 is started in late FY 02/early FY 03). Based on HQDA priorities and the force structure allowance (FSA), MACOM proposed CPLANs reflect the current and projected personnel strengths for the MTOE force. This includes any FVC EDATE changes that are required due to personnel or equipment issues.

The process begins with a CPLAN guidance message, released by HQDA (Office of the Deputy Chief of Staff, G-3). CPLAN guidance sets the focus for a forthcoming documentation cycle, lists documentation priorities and actions, and provides force structure allowances (FSA) for COMPO 1 units. Draft MTOEs are prepared by the U.S. Force Management Support Activity (USAFMSA), and reviewed by HQDA and MACOMs. Proposed CPLANs incorporate the strength levels of the draft MTOEs and reflect force decisions in HQDA guidance, including the program force approved in the The Army Plan (TAP) and Army Structure (ARSTRUC) Guidance. CPLANs reflect the current and projected force structure of each command. CPLANs normally contain only military manpower.

After HQDA review, DCSOPS publishes an adjusted Master Force (MFORCE) and an associated civilian annex reflecting the approved plan. The adjusted MFORCE provides the basis for resourcing personnel and equipment in the draft MTOEs and TDAs.⁴¹

The purpose of the preceding and somewhat lengthy explanation is to capture the complexity of the TAA process, the Army's force-sizing construct resulting in programming decisions for the POM. Transformation will not be achieved unless it is funded; but the question that must be answered is how to get inside the cycle, make the process cross-functional, and more responsive to the dynamics of change. The essence of LTG Riggs' point is that one cannot accomplish technology insertions as they become available without working around the process. If LTG Riggs wants to insert Objective Force technology into Army organizations today (FY03) for implementation in FY 08, organizational decisions actually should have been programmed in the TAA 09 cycle completed in the second quarter of FY02. The process already has him behind.

The "long pole in the tent" regarding decisions for the organizational design is in this case Objective Force technology; technology is often encumbered by long lead times for the research, development, and acquisition process. Organizational designs are currently being worked for the Unit of Action modeling required for TAA without confirmation of the final Future Combat System (FCS) design and capabilities. Also, if programming decisions are made regarding FCS and associated Objective Force technological enablers which often generate reduced personnel requirements, failure to meet fielding timelines means that personnel requirements will have to be added back into the organization. Within constrained resources, this will shift other resourced force structure to COMPO 4, or unresourced, which requires additional work-arounds and risk mitigation analysis.

Additionally, the work-around problem is exacerbated by lack of fidelity in other requirements identification necessary for transformation, i.e., decisions are required for the Army National Guard redesign to possible Homeland Security structure, post-Iraq force guidance, Special Operations Forces increases and TDA/Third Wave outsourcing.

Why TAA? It is the Army's means to develop required force structure for the POM. If transformation is a process to continuously improve the preeminence of the United States military in the context of disproportionate and discontinuous changes in the strategic environment—without clear guidance and an accurate picture of the threat how can one predict with certainty what the Army must be in 2011 and in detail for funding?

Without a clear strategic framework to define what the organization wants to be, long-range planning is forced to build a composite picture of the organization by projecting every detail of the business forward...Such effort acts as a deterrent to change; it transforms most long range plans into Gothic structures of inflexibility."⁴²

And so this supports the argument that our processes which culminate in funding the decisions must become more disciplined and synchronized to mitigate risk associated with predicting the future, and perhaps become continuous vice biennial. Simultaneously, an effort should be made to complete an integrated business process redesign in order to streamline efforts and consider automation as an enabler. These modifications should serve to synchronize decision-making in consideration of second and third order effects. Attention should be given to an up-front horizontal assessment process to issue better guidance to force planners. Finally reinstitute the Force Validation Committee to confirm force management decisions and prevent instant unreadiness.

In order to accomplish process refinement, leaders must understand the processes which effect change. Robert S. Kaplan and David P. Norton's book entitled "Strategy-Focused Organization" states:

"In our own work with clients, we have seen why strategies do not get executed. Too often, a strategy devised in the boardroom exists only in planning documents throughout the organization. It is never linked to how that organization actually operates, and it's never communicated to the people who come in to the office every day to face the customers and do the actual work. Our view is that most companies are not very conscious of how they do their work. The problem with that is that if you do not know how you do your work you cannot know how to improve."⁴³

This leads us to a discussion of the organization that is charged to "do the actual work."

BLAME IT ON THE PIT CREW –PROBLEMS WITH THE ORGANIZATION AND THE PEOPLE

In a "strategy-focused organization," strategy [transformation] becomes a continuous process owned not just by top management, but by everyone. If given the necessary resources, the organization, e.g., the owners of the process will change internal business processes to achieve the strategy. Strategy implementation requires that all components of the organization are linked to the strategy.

The organizational design development function, as well as all DOTMLPF requirements development, is the responsibility of TRADOC. According to a February 2003 GAO study in response to Congressional concerns regarding TRADOC readiness, TRADOC personnel authorizations as a percent of requirements has declined from 80 to 71% since 1995, while workload has significantly increased. This has resulted in workload backlogs in doctrine and training development, both precursors of organizational change. GAO recommended that the Army validate TRADOC's workload and personnel requirements before any further manpower

reductions. Concurrently, TRADOC must reengineer its organization and processes, both difficult tasks if merely keeping pace with mission requirements.⁴⁴

Once organizations are designed by TRADOC they are provided to HQDA for approval. In the midst of transformation, the Army Staff reorganized. In December 2000, HQDA created the Office of the Deputy Chief of Staff for Programs, now the G8, and subsequently, the Deputy Chief of Staff, G-3, Directorate of Requirements (DAMO-RQ) as a measure to separate the requirements validation process from the resourcing process. DAMO-RQ serves as the single HQDA entry point and proponent for Army and Joint DOTMLPF requirements (less resources). It provides the Army position on service and Joint requirements and facilitates the HQDA staffing, validation, approval and prioritization of submitted requirements documents. The organization is made up of Requirements Staff Officers (RSOs), assigned to lead requirements analysis teams to analyze, coordinate, and provide recommendations for DOTMLPF requirements.⁴⁵

The RSOs coordinate with G-3, Directorate of Force Management (DAMO-FM) regarding TDA doctrine and manpower/equipment requirements and provides RSO participation in the TAA process as required. A cursory review of the DAMO-RQ SOP indicates that their organization is the HQDA entry point for all DOTMLPF requirements and is tasked with the coordination for approval of Force Design Updates (FDU). However, the FDU process actually resides within the office of the Director of Force Management, DAMO-FM, who is also the proponent for the TAA process. The FDU process actually was transferred to DAMO-RQ in the spring of 2000 but was returned to DAMO-FM in 2002.⁴⁶ The RQ SOP is replete with examples of approving materiel requirements, however if the goal of force management is to design mission-ready organizations, who is integrating the organization?

Organizational Integrators are assigned to G-3, DAMO-FM. However, as previously stated, they represent organizational interests of functionally similar organizations in a specific branch.

Document integrators are assigned to the U.S. Army Force Management Support Agency (FMSA), a field operating agency (FOA) of HQDA, G-3, DAMO-FM. These individuals ensure that requirements and authorizations meet approved Army force programs, again from a branch perspective. The organization is undergoing change to streamline the documentation process in preparation for the fielding of the Army's Force Management System, an automated approach to documentation. USAFMSA will transform into multi-functional documentation divisions, which will manage both requirements and authorizations for the operational forces. There are three

major parts to USAFMSA transformation: reorganization, functional realignment, and automation.

USAFMSA's functional realignment is designed to provide seamless, cradle to grave documentation of requirements and authorizations from a single USAFMSA branch, organized respectively as Combat, Combat Support, and Combat Service Support. TDAs will continue to be managed by the USAFMSA TDA Division.⁴⁷ While this reorganization appears to support the process of documentation of similar organizations, it still does not appear to effect organizational integration.

The System Staff Officers, G8, represent the user interests of materiel management. Although somewhat functional, or branch specific, they have made important strides to effect horizontal organization through a concept known as "unit set fielding." The SSO develops a plan, ensuring DOTMLPF integration, to synchronize programs and resources to field warfighting capability in a "system of systems" approach based on approved authorization documents to an organization vice a specific branch.⁴⁸ This may prove difficult in the execution phase if unit requirements were not integrated from initiation of the approval process.

The primary organization charged with horizontal integration is the Force Integration Branch, G3, and DAMO-FM. Force Integrators assigned to this branch are charged with synchronizing the force integration functional areas (FIFA) --the structuring, manning, equipping, training, sustaining, deploying, stationing, and funding of brigade through echelon above corps Army organizations. There are currently seven military, one civilian and three contractor authorizations to perform this function for all COMPOS.⁴⁹ This raises two issues: are these individuals duplicating the efforts of the RSOs or are they in fact charged with the functional integration function by echelon as outlined in the "How the Army Runs" definition of force management? It is difficult to discern, as with most of the dated Force Management doctrine and regulations, the manual, although being rewritten, does not accurately depict "How the Army is Running."

In the absence of organizational-to-functional clarity and to facilitate transformation, organizations often task organize to fill short-falls. There are Process Action Teams (PAT); however in organizations with low density subject matter experts, an individual's membership on multiple PATs is the norm. There is a Transformation Office at HQDA, a TRADOC Brigade Coordination Cell at Fort Lewis for SBCT DOTMLPF integration, a Digitized Force Coordination Cell at Fort Hood and an Objective Force Task Force. It is ironic, but if charged with transforming the Army perhaps we should first look at a functional assessment and reengineering of the organizations which effect change, vice a workaround ad hoc approach

which generates additive TDA requirements. Updates to process manuals should follow in order to institutionalize the process.

A tremendous improvement has occurred to developing personnel who perform force management within the aforementioned organizations. In 1997, the Chief of Staff of the Army approved a revision to the personnel management system which created an officer Career Field-based management system, Officer Personnel Management System XXI (OPMS XXI) composed of four Career Fields: Operations, Operational Support, Institutional Support and Information Operations. Under OPMS XXI (now called OPMS 3), officers are designated into a single Career Field after selection for major and serve and subsequently compete for promotion in their designated Career Field. Officers who select the Force Management (FA 50) functional area are responsible for components of the capstone process to establish and field mission-ready Army organizations.⁵⁰ The value added should be the development of an officer who understands the complex force management processes encompassing requirements definition, structuring, combat developments, materiel developments, training development, resourcing and all elements of the Army life cycle model. An officer who remains in the in the Operations Career field knows that branch qualification results from S3, XO, and battalion command. The FA 50 progressive and sequential leader development process is not as clear, except to indicate that attendance at Force Management School should be followed by assignment to various Force Management positions at all levels of command.

The capstone assignment or “battalion command” for an FA 50 officer should be a “Force Integration Staff Officer,” an individual with in-depth knowledge of the process and capability to integrate organizational requirements from a force integration functional area perspective. As stated earlier, this position, in concept, does not currently exist in a robust organization on the Army Staff. If the end state of force management is to design a mission-ready organization, then this position should be resourced in either DAMO-RQ, or within DAMO-FM.

The only thing then required of the leadership would be to provide the tools, in this case, automated systems, to gain process efficiency and effect mission accomplishment.

THE TOOLKIT—AUTOMATION REQUIRED TO CHANGE THE ENGINE

“DOD has over 10,000 computer systems of which its component agencies have designated about 2,300 as ‘mission-critical.’ DOD has some 1.5 million individual computers, most of which are networked; to keep abreast of changing technology, about a third are replaced each year. Software is upgraded regularly. Hundreds of organizations procure and operate the equipment. Even the massive effort to prepare the department for Year 2000 (Y2K) produced only crude DOD-wide lists of important IT [Information Technology] assets.”⁵¹

John A. Gentry's article, "Doomed to Fail: America's Blind Faith in Military Technology," addresses why operational advantage will not be achieved through the use of technology. He cites numbers of systems, lack of interoperability, independent acquisition, and understanding of process as root causes of failure.⁵²

In order for automation to be the force management panacea, there should be a recursive relationship between automation and the process: Automation should support business processes and business processes should be in terms of the capabilities automation can provide. Without an understanding of the complex problems inherent in force management and without first fixing process disconnects, we often get what we ask for in automation requirements identification. Force management is not lacking in automated stove-pipe data bases, depicted in figure 3, and explained as follows:

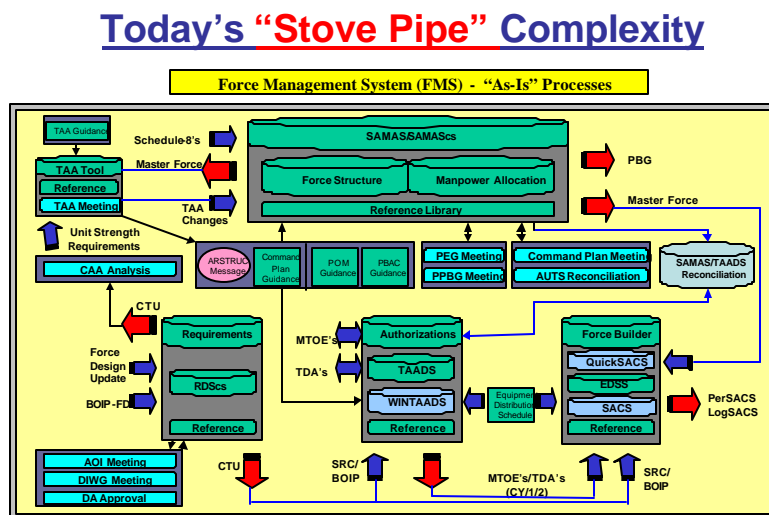


FIGURE 3

The Army Authorization Documents System (TAADS) applies to the Army-Active Army, Army National Guard, Army Reserve, and civilian work force. The Army uses the system to record changes in requirements and authorizations that result from decisions affecting unit missions, organizational structure, and equipment.

TAADS defines requirements and authorizations for MTOE units at various levels of organization using data from the Table of Organization and Equipment (TOE) system, Incremental Change Packages (ICPs), and Basis-of-Issue Plans (BOIPs). Data from the BOIP identify quantitative and qualitative requirements for new items of equipment, including personnel requirements to accommodate them. Requirements for TDA units derive from concept plans, manpower surveys and studies, and manpower standards application.

The Structure and Manpower Allocation System (SAMAS) serves as the force development database that records the authorized level of manpower and force structure for the Army program and budget. SAMAS has two primary files. One is the Force Structure file (commonly referred to as the "force file"), which reflects the approved and documented force structure position. The force file produces the MFORCE. The second file is the Program and Budget Guidance (PBG) file (commonly referred to as the "budget file"). It reflects the approved CPLAN manpower structure plus additional budgeting assumptions. The budget file produces both the civilian annex to the MFORCE and the Manpower Addendum to the PBG.

At the close of the documentation cycle, the Automatic Update Transaction System (AUTS) is run. AUTS compares the CPLAN, MFORCE, (FS/PBG) against the TAADS documents. When discrepancies are discovered, the TAADS documents are corrected or the MFORCE (FS/PBG) file is adjusted to reflect leadership decisions. The AUTS comparison occurs at the close of the documentation cycle and is the basis for approving those MTOE/TDA documents that match their MFORCE (FS/PBG) position. HQDA then publishes a new MFORCE file showing those units with approved TAADS documents. This post-AUTS MFORCE provides the basis for updating the database for the DCSPER/PERSCOM Personnel Management Authorization Document (PMAD), the logistics management files, and other force management databases.

The Structure and Composition System (SACS), produced by a management database integration system called Force Builder, documents the Army's time-phased demands for personnel and equipment over the current, budget and program years (up to a total of ten years). SACS information combines information from BOIP, TOE, SAMAS, and TAADS data. One of the two key outputs is the Personnel and Structure Composition System (PERSACS). PERSACS summarizes time-phased requirements and authorization for personnel, specifying grade and branch as well as functional area specialties and Military Occupational Specialty (MOS). The other key product is the Logistics Structure and Composition System (LOGSACS). LOGSACS summarizes time-phased requirements and authorizations for equipment at Line Item Number (LIN) level of detail. PERSACS and LOGSACS form the requirements and

authorizations base used by other personnel and logistics systems. The Total Army Equipment Distribution Program (TAEDP), for example, uses equipment requirements and authorizations from LOGSACS to plan equipment distribution throughout the program years.⁵³

There is an effort to integrate the aforementioned data bases. The Force Management System (FMS) will combine the requirement, authorization and accounting systems to provide the force management community a single integrated database and a single integrated document as depicted in figure 4.⁵⁴ FMS Initial Operational Capability (IOC) is scheduled for November 2003; FMS Full Operational Capability is scheduled for November 2004. However, the IOC date has once again slipped to FY 05, and is under review.⁵⁵

Tomorrow's Efficiency

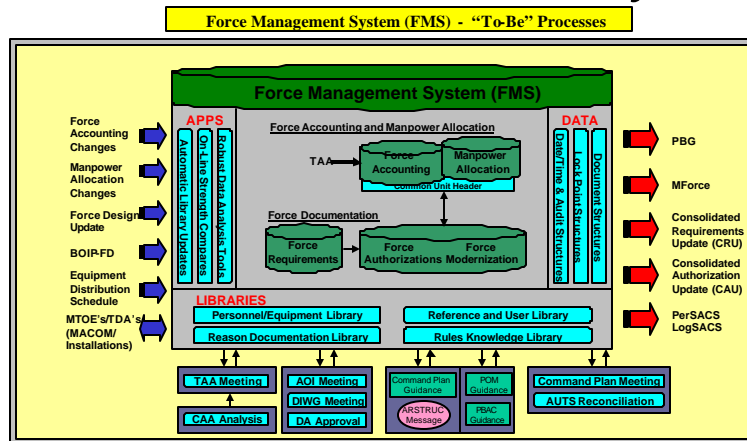


FIGURE 4

There is an automation success story-- The Army Flow Model (AFM). The AFM is built upon an integrated database of approved data outputs collected from the functional areas of the Army (Force Structure, Logistics, Personnel, Stationing, and Costing), and subsequent integration of data from legacy and current database systems. This data is processed and placed into a data warehouse of historical, current, and programmed data.

AFM applies HQDA business rules to the integrated raw data to produce analytical intelligence. Each model is linked through the database to ensure that output and analysis is consistent across the system and the functional areas. Historical, current, and projected data

form the baseline from which the model develops readiness projections. These projections are by unit, MOS, and LIN level of detail to develop a complete picture of the Army status over time. These features are critical in accessing the “health” of the Army and maintaining the optimal path towards Transformation and Modernization.

Flexibility of data management is a key capability of the Army Flow Model. AFM possesses the capability to integrate vast quantities of data and synthesize it into useful information, thereby providing ARSTAF action officers the ability to provide quick turn-around answers. This greatly increases the accuracy and timeliness of the Army's critical assessments required of the Quadrennial Defense Review, Transformation, Modernization, Force Validation Committee and Total Army Analysis.⁵⁶

Other agencies have made attempts to automate their own internal processes as well. The Objective Force Task Force effects timeline synchronization with Microsoft Project. The Transformation Office uses an automated program to manage the synchronization of the lines of operation and produces conditions review progress for senior leader decisions. The automation solution must capture these separate initiatives and provide for cross-functional process efficiency—and in the 21st Century, we have the technology. The bottom line provided by the data analyst who works AFM, is that any attempts at automation must start with the process, “...big part is re-engineering the business processes to support feasibility, supportability, and affordability of current, programmed, and hypothetical HQDA initiatives over time. We do this by reassessing current business processes with the staff to ensure software development both answers the mail and modernizes the way we do things. Building new software on old processes does not modernize the army or increase efficiency or accuracy in assessments.”⁵⁷

And so, in the context of the process, the organization, and efficiency gained through automation, transformation is not the end state, but rather the journey. It is ill-affordable to continue doing the same things and expect a revolutionary result. Imagine what General Marshall, someone who designed and understood the force management process, could have accomplished by harnessing the power of the microchip....a total transformation of landpower to enable a joint force strategically responsive across the full spectrum of operations. Perhaps he could have overhauled the engine while going at 80 miles an hour—we owe the Army of the future nothing less.

Word count=7657

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⁴ Harlan Ullman and James P. Wade et al., Shock and Awe: Achieving Rapid Dominance (Washington, D.C.: National Defense University, 1996), 10.

⁵ Department of Defense, Quadrennial Defense Review (QDR) Report, 29.

⁶ Headquarters, Department of the Army, Transformation Campaign Plan (Change 1), (Washington, D.C.: Office of the Secretary of the Army, 6 December 2002), 2.

⁷ Ibid, 2.

⁸ Ibid, 2.

⁹ Ibid, 12. The thirteen lines of operation are as follows: (1) Joint, Interagency, Multinational, and Army Strategy, Concepts, Requirements and Plans; (2) Modernization and Recapitalization; (3) Manning the Force and Investing in Quality People; (4) Manage Army Readiness and People; (5) Training and Leader Development; (6) Operational Force Design; (7) Army Doctrine; (8) C4ISR; (9) Deploying and Sustaining; (10) Develop and Acquire Advanced Technology; (11) Management of Force Programs; (12) Installations; (13) Resourcing.

¹⁰ Ibid, 14-15.

¹¹ Ibid, 14-15.

¹² Headquarters, Department of the Army, Objective Force Task Force, The Objective Force in 2015 White Paper (Final Draft), (Washington, D.C.: Office of the Director, Objective Force Task Force, 8 December 2002), 2.

¹³ Quadrennial Defense Review (QDR) Report, 17, 32, 35,49.

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¹⁵ Ibid, A-1-2.

¹⁶ U.S. Army War College, How the Army Runs: A Senior Leader Reference Handbook, 2001-2002, (Carlisle, PA: Office of the Commandant, 15 May 2001), 1-1.

¹⁷ Yogesh Malhotra, "Business Process Redesign: An Overview," IEEE Engineering Management Review, vol. 26, no.3, Fall 1998 [journal on-line]; available from <http://www.brint.com/papers/bpr.htm>; Internet; accessed 26 March 2001.

¹⁸ Hans Binnendijk, ed., Transforming America's Military, (Washington, DC: National Defense University Press, 2002), xvii.

¹⁹ How the Army Runs: A Senior Leader Reference Handbook, 2001-2002, 2-1. Force development is the process of determining Army doctrinal, training, leader development, organizational, materiel, and soldier (DTLOMS) requirements and translating them into programs and structure within allocated resources to accomplish Army missions and functions. Force integration is the synchronized, resource-constrained execution of an approved force development program to achieve systematic management of change. It includes the functions of structuring organizations, manning, equipping, training, sustaining, deploying, stationing, and funding the force during the incorporation of approved organizational or force structure changes. It also includes the function of minimizing adverse impacts on force readiness during the introduction and incorporation of change. Force integration synchronizes these functional activities to produce combat ready organizations and is the enabling process of force management. Force management is the capstone process to establish and field mission-ready organizations.

²⁰ Richard J. Dunn, III, "Transformation: Let's Get it Right this Time," *Parameters* Vol. 31, No. 1 (Spring 2001), 22-28.

²¹ How the Army Runs: A Senior Leader Reference Handbook, 2001-2002, 2-14.

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²³ Department of the Army, Army Programs: Functional Area Assessment, Army Regulation 11-40 (Washington, D.C.: U.S. Department of the Army, 15 December 1995), 1.

²⁴ Department of the Army, Force Management Analysis (FORMAL) Review (Draft), Army Regulation 11-xx (Washington, D.C.: U.S. Department of the Army, G3, DAMO-FMF, 2 July 2001),

²⁵ LTC Robin L. Mealer, "Corps FORMAL Review Action Officer Meeting," briefing slides, Washington, D.C., Headquarters, Department of the Army, G3, DAMO-FMF, 20 March 2001.

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- ³¹ LTC Bienvenido Rivera, Chief, Force Integration Branch, DAMO-FM, G3, Headquarters, Department of the Army, telephone interview by author, 10 March 2003.
- ³² MAJ Tom Poplawski, Action Officer, Force Integration Branch, DAMO-FM, G3, “Organizational Design Update to Director, Force Management,” briefing slides, Washington, D.C., Headquarters, Department of the Army, 3 March 2003.
- ³³ Department of the Army, Force Integration, Field Manual 100-11 (Washington, D.C.: U.S. Department of the Army, January 1998) 5-5.
- ³⁴ Mr. Dan Egbert, Deputy Division Chief, DAMO-FMF, G3, Headquarters, Department of the Army, telephone interview by author, 10 March 2003.
- ³⁵ Department of the Army, Total Army Analysis, Army Regulation 71-11 (Washington, D.C.: U.S. Department of the Army, 29 December 1995), 1.
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- ³⁸ Ibid, 10.
- ³⁹ Ibid , 11.
- ⁴⁰ Ibid, 12.
- ⁴¹ How the Army Runs: A Senior Leader Reference Handbook, 2001-2002, 5-32 – 5-33.
- ⁴² Henry Mintzberg, The Rise and Fall of Strategic Planning, (New York: The Free Press, 1994), 176.
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